NAD SERVICE MANUAL

2240PE

POWER AMPLIFIER

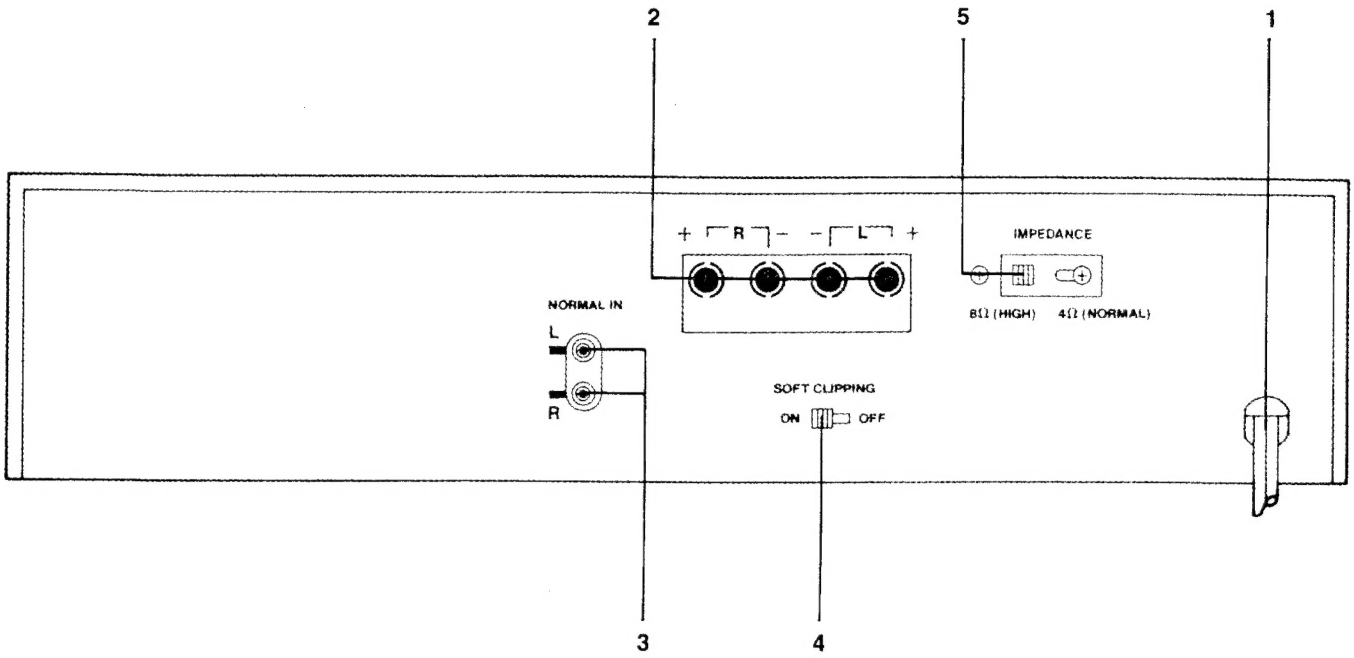
CONTENTS
-2240PE-

REAR PANEL

1. AC Line Cord.
2. Speakers.
3. Normal Inputs.
4. Soft Clipping.
5. Speaker Impedance.

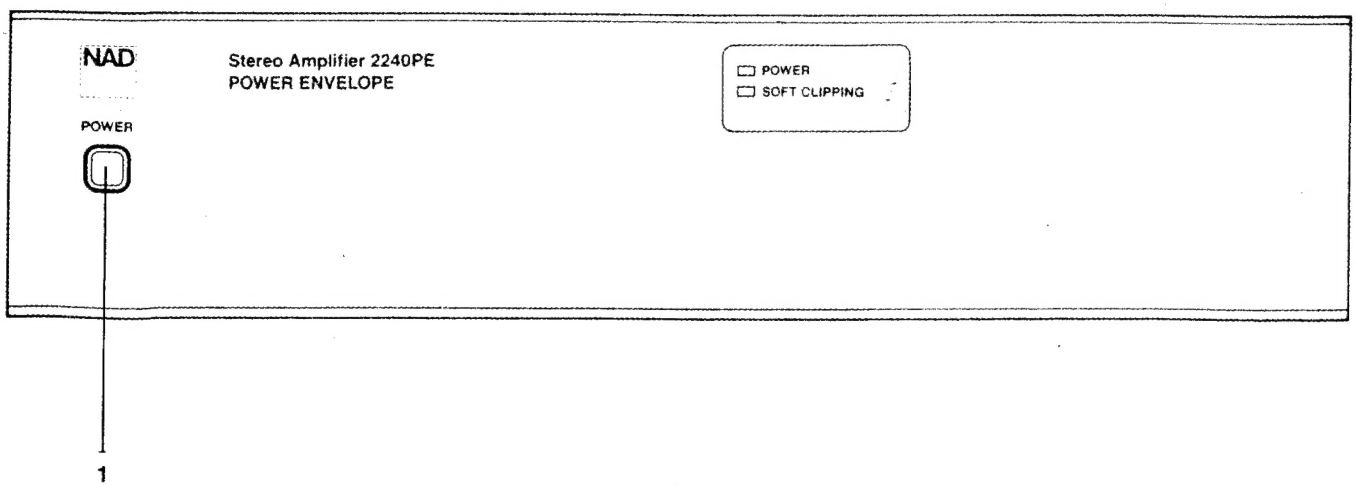
CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



FRONT PANEL

1. Power.



Specifications
NAD 2240PE Stereo Amplifier
Note: Specifications are measured in accordancae with EIA Standard RS-490 (IHF A-202). Measurements referred to 8 ohm are taken with the Speaker Impedance selectorset to 8 ohm (High). Measurements for 4 and 2 ohm are taken with impedance selector at 4 ohm (Normal).

Power Amplifier Section		
CONTINUOUS AVERAGE POWER		
OUTPUT AT 8 OHM (minimum RMS power per channel, both channels driven, with no more than the rated distortion)		40W(16 dBW)
Rated distortion (THD), 20 Hz - 20 kHz		0.03%
Clipping power, 1 kHz (maximum continuous power per channel)		50 W
Dynamic Headroom at 8 ohm		+6 dB
Dynamic power (maximum short-term power per channel)	8 ohm	160 W
	4 ohm	200 W
	2 ohm	250 W
Damping factor		>50
Slew factor		>50
Slew rate		15V/usec
T.H.D. and SMPTE I.M. distortion from 250 mW to rated output		<0.03%
IHF I.M. (CCIF IM) and T.I.M. distortion at rated output		<0.03%
Input impedance		22 kohm
Input sensitivity for 1 Wa/40 W out		160 mV/1.0 V
Power amp gain		25 dB (18X)
Low Level (audio muting)		-20 dB
Physical Specifications		
Width x Height x Depth		42 x 10.8 x 38 cm. 16.5 x 4.25 x 15 in.
Net Weight		6.425 kg
Shipping Weight		7.72 kg
Power Consumption		50/60 Hz at 110, 120, 220, or 240 VAC 200 W

ALIGNMENT METHOD

AUDIO SECTION 2240PE

IMPORTANT
Speaker Impedance switch should be in 8 ohm position while adjusting center volatge and idling current.

INITIAL ADJUSTMENT (No load connected)

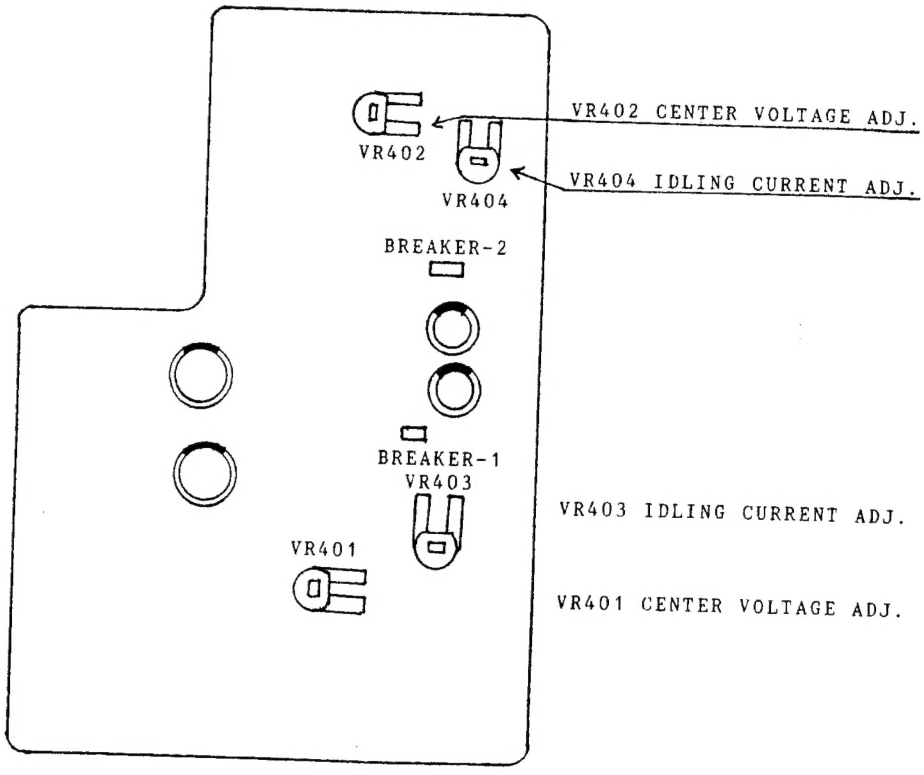
A. CENTER VOLTAGE
   1. Connect DC millivoltmeter to L channel output terminals.
   2. Turn on and adjust to 0 V ± 30mV with VR401 (10KB). Connect DC millivoltmeter to R channel output terminals and adjust VR402 to 0 V ± 30mV.

B. IDLING CURRENT
   1. Remove solder short across R461 and R462.
   2. Connect DC millvoltmeter across R471 (1 ohm) (output transistor's collector resistor) and adjust VR403 (1KB) for 26 - 30mV reading on meter. Repeat adjust with VR404 (1KB), connecting meter across R472 (1 ohm).
   3. leave power on for minimum 5 minutes.

FINAL ADJUSTMENT

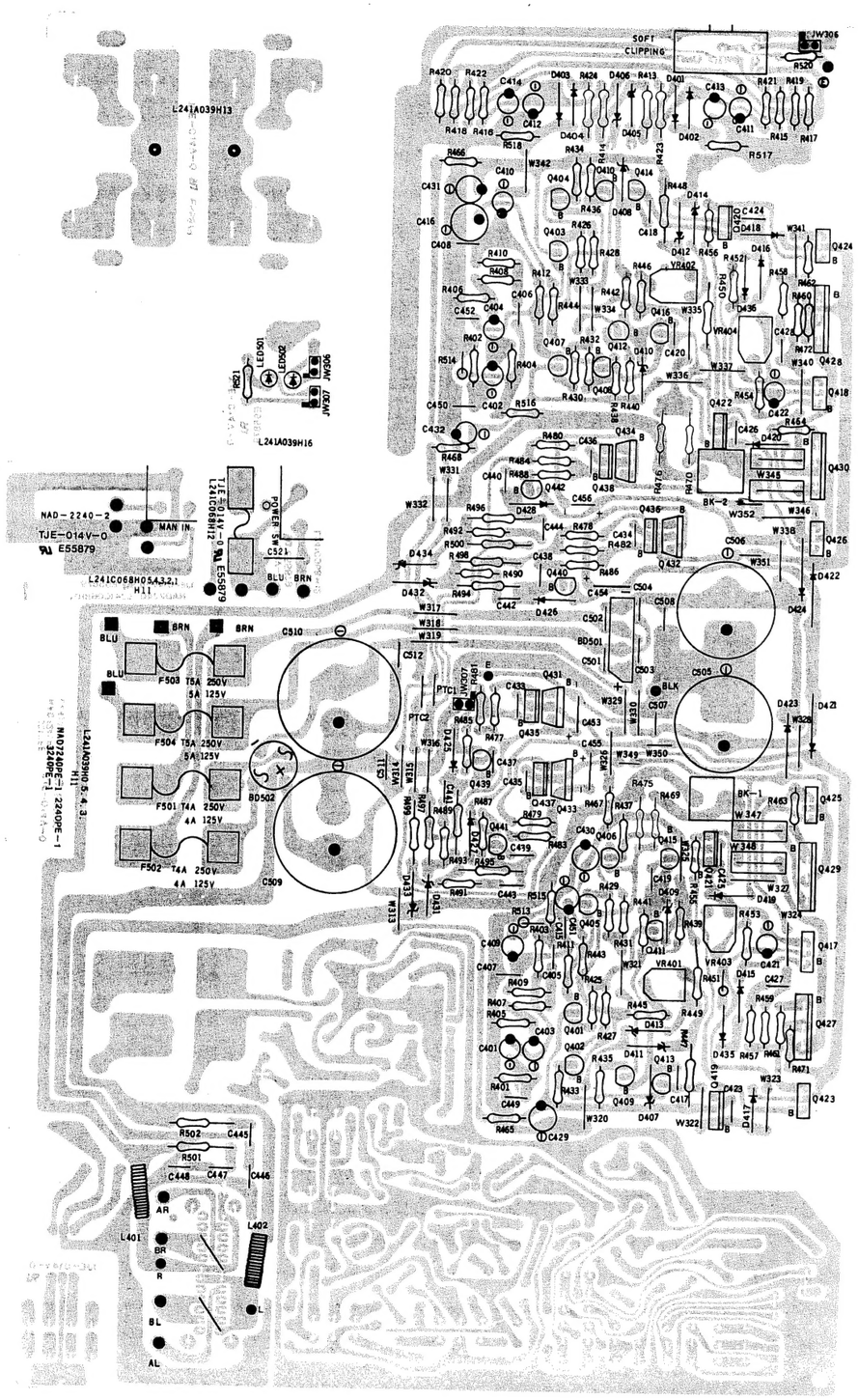
C. CENTER VOLTAGE
   1. Repeat step A above.

D. IDLING CURRENT
   1. Repeat step B and adjust with VR403, VR404 for 30mV reading on meter.
   2. After the alignment is finished, 1 ohm resistor R471,R472 is shorted by solder short.

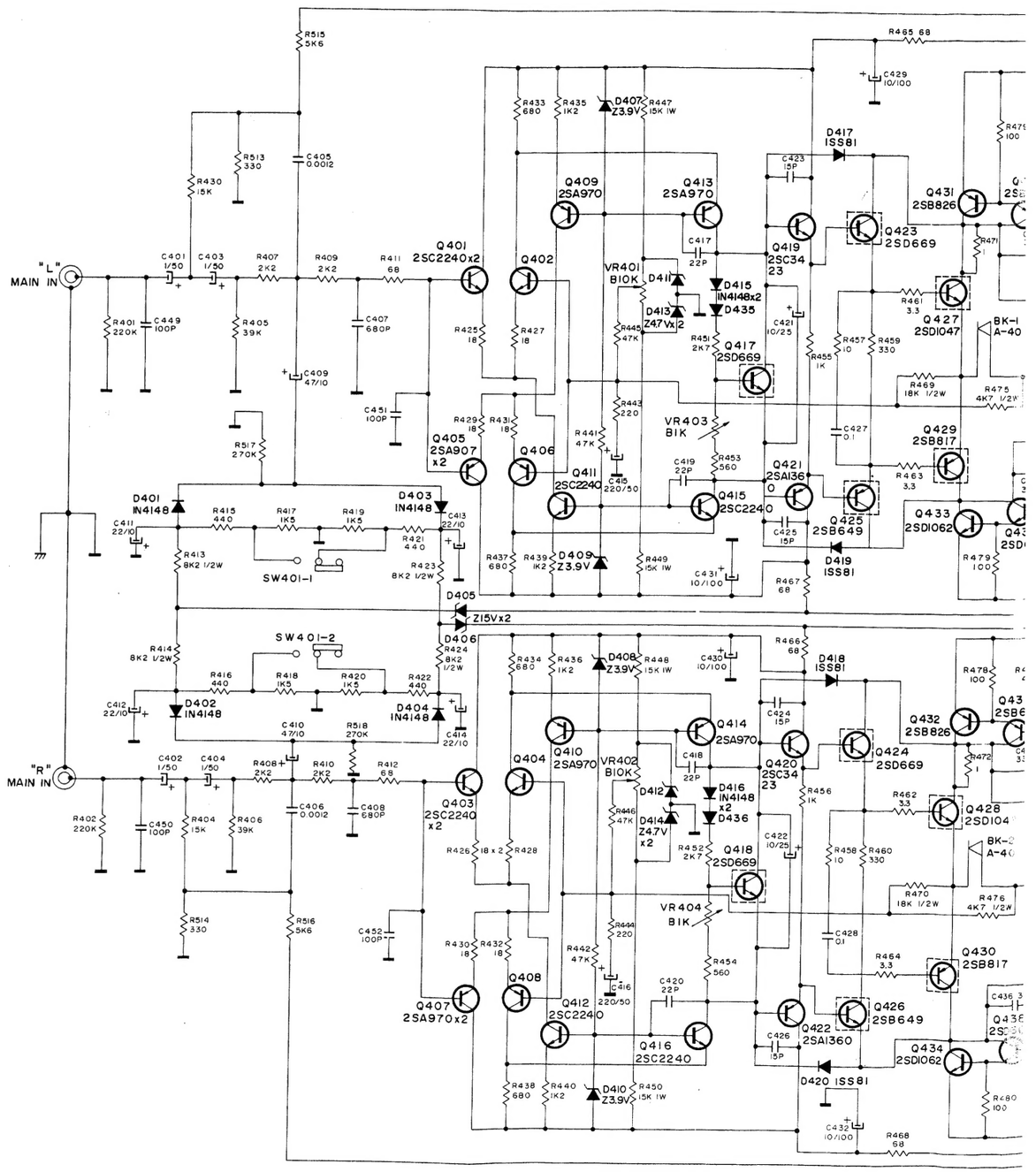


AMPLIFIER ADJUSTMENT POINTS

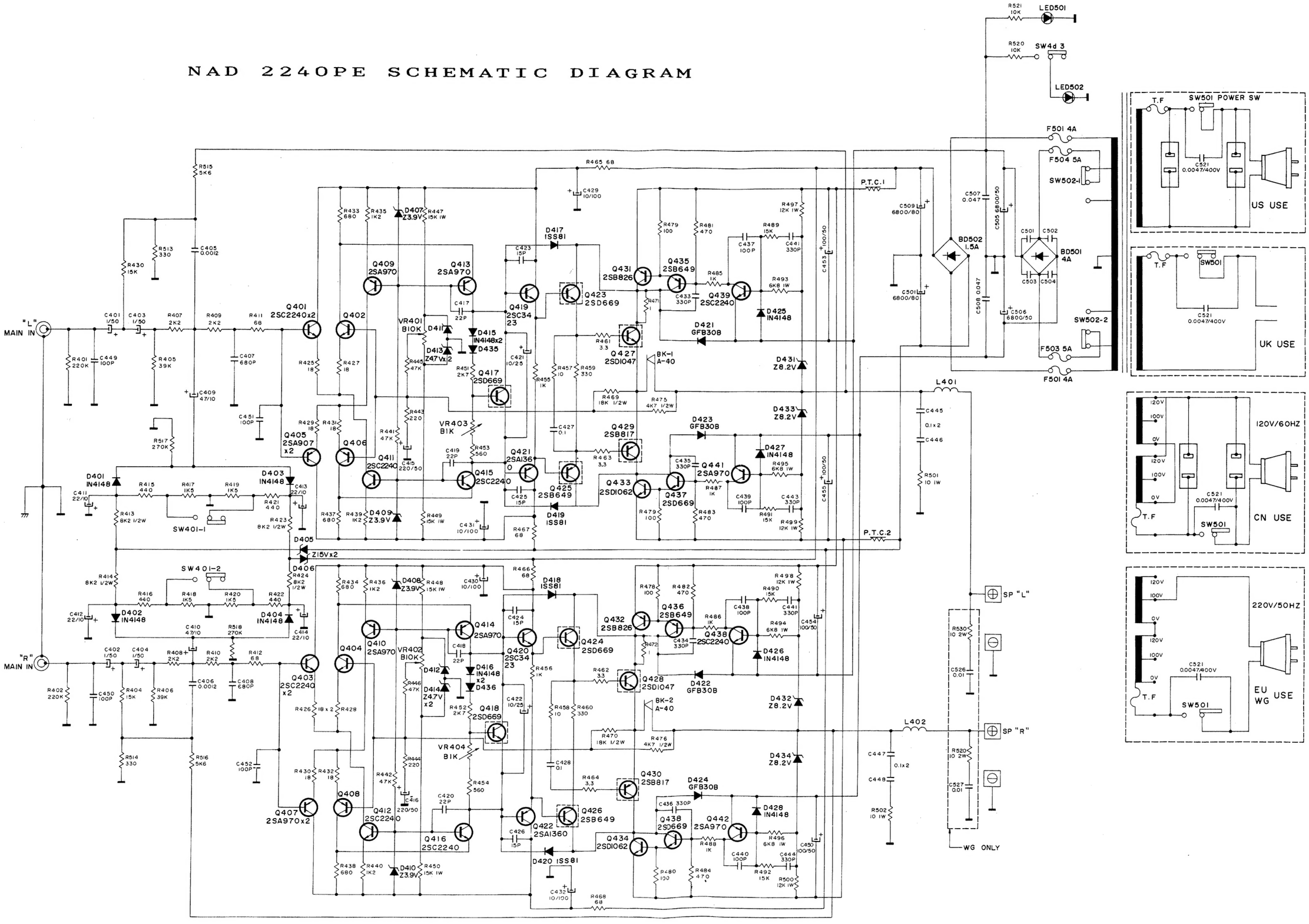
NAD 2240PE PCB COMPONENT LOCATION



NAD 2240PE SCHEMATIC DIAGRA



NAD 2240PE SCHEMATIC DIAGRAM



NAD 2240PE PARTS LIST

FR	GP	UK	EU	AS	SA	PARTS NUMBER	DESCRIPTION	SPECIFICATION	Q'TY	UNIT
US	CN	WG	EP	UT	JP					
*						L902A015G01	MAIN-AMP			PCS
	*					L902A015G02				PCS
		*				L902A015G03				PCS
			*			L902A015G04				PCS
				*		L902A015G05				PCS
					*	L902A015G06				PCS
				*		L902A015G07				PCS
					*	L902A015G08				PCS
					*	L902A015G09				PCS
*						L923A018G01	MAIN AMP-UNIT			PCS
	*					L923A018G02				PCS
		*				L923A018G03				PCS
			*			L923A018G04				PCS
				*		L923A018G05				PCS
					*	L923A018G06				PCS
				*		L923A018G07				PCS
					*	L923A018G08				PCS
					*	L923A018G09				PCS
*						L989D042G01	ACCESSORY-ASSY			PCS
	*				*	L989D042G02				PCS
		*				L989D042G03				PCS
			*			L989D042G04				PCS
				*	*	L989D042G05				PCS
*						L851D054H08	LABEL-PACKING			PCS
	*					L851D054H09				PCS
		*				L851D054H02				PCS
			*			L851D054H01				PCS
				*		L851D054H05				PCS
					*	L851D054H04				PCS
				*		L851D054H03				PCS
					*	L851D054H07				PCS
					*	L851D054H06				PCS
*	*	*	*	*	*	U096S044H03	TAPE,750MM*2 PCS	W:50		M
*	*	*	*	*	*	U096S004H01	30MM*2 PCS	W:12		M
*	*	*	*	*	*	U83AS006H07	PARTS-BAG	AC CORD		PCS
*	*	*	*	*	*	L831D002H01	BAG-POLY	SET		PCS
*	*	*	*	*	*	L800D013H01	CARTON-OUTER			PCS
*	*	*	*	*	*	L800D003H05	CARTON-	INDIVIDUAL		PCS
*	*	*	*	*	*	L813A006H01	STYRO PACKING			PCS
*	*	*	*	*	*	L851D061H01	SHEET PACKING			PCS
*	*	*	*	*	*	L851D057H08	LABEL SERIAL			PCS
*						L908A017G10	FULL BLOCK ASSY			PCS
	*					L908A017G11				PCS
		*				L908A017G12				PCS
			*			L908A017G13				PCS
				*		L908A017G14				PCS
					*	L908A017G15				PCS
				*		L908A017G16				PCS
						L908A017G17				PCS
						L908A017G18				PCS
*	*	*	*	*	*	L580C011G01	CABINT-BOTTOM	ASSY		PCS
*	*	*	*	*	*	L702A047H01	FRONT PANEL			PCS
*	*	*	*	*	*	L561A010H01	COVER-TOP			PCS
	*					L851D065H01	LABEL-AC			PCS
		*				L851D066H01	LABEL-CSA			PCS
		*				L851D090H01	LABEL-CSA (B)			PCS
					*	L851D062H01	LABEL-VOLTAGE			PCS
*	*	*	*	*	*	L851D057H08	LABEL-SERIAL			PCS
*	*	*	*	*	*	U656S263H23	T-SCREW, COVER BOT FIX	2-3*6		PCS
*	*	*	*	*	*	L650D006H03	SCREW-B,COVER-TOP FIX	M4*8		PCS
*						L703B045G01				PCS
	*					L703B045G02				PCS
		*				L703B045G03				PCS
			*			L703B045G04				PCS
				*		L703B045G05				PCS
					*	L703B045G06				PCS
					*	L703B045G07				PCS
					*	L703B045G08				PCS
					*	L703B045G09				PCS
*						L547B014G10	MAIN CHASSIS	ASSY		PCS
	*					L547B014G20		ASSY		PCS
		*				L547B014G30		ASSY		PCS
			*	*	*	L547B014G40		ASSY		PCS
					*	L547B014G50		ASSY		PCS
					*	L547B014G60		ASSY		PCS
*		*				L547B029G10	FRAM-L ASSY			PCS
			*	*	*	L547B029G11				PCS
				*		L547B029G12				PCS
		*			*	L547B029G13				PCS
*	*	*			*	L241B120G01	FRAM-L ASSY			PCS
			*	*	*	L241B120G02				PCS
*	*	*	*	*	*	L241B092G60	PCB LED ASSY			PCS
*	*	*	*	*	*	L704D061H02	KNOB-POWER			PCS
*	*	*	*	*	*	U656S164H24	T-SCREW,COVER BACK FIX	1-3*8		PCS
*	*	*	*	*	*	U656S263H23	PCB MAIN FIX	2-3*6		PCS
*	*	*	*	*	*	U656S263H23	T-SCREW,LED-PCB FIX	2-3*6		PCS
*	*	*	*	*	*	L090D003H01	SHEE-ISOLATING			PCS
*	*	*	*	*	*	U656S264H23	T-SCREW,PANEL FIX	2-3*6		PCS
*	*	*	*	*	*	U656S263H23	FRAME R & L FIX	2-3*6		PCS
*	*	*	*	*	*	U656S263H23	HEAT SINK FIX	2-3*6		PCS
*	*	*	*	*	*	L547B006H01	FRAME(R)			PCS
*	*	*	*	*	*	U680S322H03	WASHER-TOOTHED	3		PCS
*	*	*	*	*	*	U838S101H01	BAND			PCS
*						L703B033G10	BACK COVER ASSY			PCS
	*					L703B033G20				PCS
		*				L703B033G30				PCS
			*			L703B033G40				PCS
		*				L703B033G50				PCS
			*			L703B033G60				PCS
				*		L703B033G70				PCS
					*	L703B033G80				PCS
					*	L703B033G90				PCS
*	*	*	*	*	*	L241B121G01	PCB-POST ASSY			PCS
			*			L241B121G02				PCS
*	*	*	*	*	*	U650S065H19	SCREW-B,SW*2 POST*4	M3*6	6	PCS
*	*	*	*	*	*	U670S003H02	NUT,BIND POST	M3	4	PCS
*	*	*	*	*	*	L241C069G01	PCB-RCA JACK	ASSY		PCS
*	*	*	*	*	*	U656S164H24	T-SCREW,RCA JACK FIX	1-3*8	2	PCS
*	*	*			*	L582A011H01	COVER-BACK			PCS
		*		*		L582A011H02				PCS
			*	*		L582A011H03				PCS
					*	L582A011H04				PCS
*	*	*				L242Y501H01	POWER-CORD			PCS
			*			U242C872H06				PCS
				*	*	U242C809H19				PCS
				*		L242Y013H01				PCS
					*	L242C310H01				PCS
*	*	*			*	L449Y002H01	SOCKET			PCS
*	*	*			*	L840D009H01	COVER-AC SOCKET			PCS
*	*		*	*	*	L431Y013H01	SW-SLIDE			PCS
		*				L431Y016G01				PCS
		*				L851D069H01	AC CORD TAG			PCS
		*				L851D070H01				PCS
*	*	*	*	*	*	L540D501H01	CLAMPER		1	PCS
*	*	*			*	U243C421H10	LEAD	BRN	1	PCS
*	*	*	*	*	*	L243C066H28		BLU	2	PCS
*	*	*	*	*	*	U053S271H05	SOLDER-RESIN		1.6	PCS
*	*	*			*	U053S271H05			0.4	PCS
*	*	*	*	*	*	L703D027H01	SW FIX PLATE		1	PCS
			*			L851B004H08	LABEL-DBP		1	PCS
*	*	*	*	*	*	L452C001G01	TERMAINAL-SP	ASSY	1	PCS
					*	L452C001G02		ASSY	1	PCS
*	*	*	*	*	*	L241A039H13	PCB-AMP, POST USE			PCS
*	*	*	*	*	*	L704C013H01	HAND-POST	BLK		PCS
			*			L704C013H03		BLK		PCS
*	*	*	*	*	*	L704C013H02		RED		PCS
				*		L704C013H04		RED		PCS
*	*	*	*	*	*	L541B018H01	HOLDER-POST			PCS
*	*	*	*	*	*	L685C001H01	POST			PCS
*	*	*	*	*	*	L685C002H01	HAND-POST			PCS
*	*	*	*	*	*	L680C006H01	WASHER-POST			PCS
*	*	*	*	*	*	U670S003H02	NUT	M3		PCS
*	*	*	*	*	*	L241C068H01	PCB-SUB		1	PCS
*	*	*	*	*	*	L241C068H11	RCA JACK			PCS
*	*	*	*	*	*	L440Y016H01	JACK-RCA		1	PCS
*	*	*	*	*	*	L242C096H26	LEAD-SHIED	BLU	1	PCS
*	*	*	*	*	*	L242C076H35	LEAD-SHIELD	BLU	1	PCS
*	*	*	*	*	*	L242D507H08	LEAD		1	PCS
*	*	*	*	*	*	L582A001H01	CHASSIS-MAIN		1	PCS
		*				L851D071H02	LABEL-WARNING		1	PCS
*	*	*	*	*	*	U650S063H19	SCREW-B,SW-POWER FIX	M3*6	2	PCS
*	*	*	*	*	*	L432Y517H01	SW-PUSH		1	PCS
*	*	*	*	*	*	L230Y005H03	COVER-CAPACITOR		1	PCS
*	*	*	*	*	*	U140Y007H07	C-CERAMIC, C521	400V 472M	1	PCS
*	*	*			*	U243C426H39	LEAD	BLU	1	PCS
*	*	*			*	U243C421H34		BRN	1	PCS
			*	*	*	L230Y003H01	CONNECTOR		1	PCS
		*			*	L230Y003H01			2	PCS
*	*	*	*	*	*	U073S722H65	TUBE-VINYL	35 DIA BLK	0.65	M
*	*	*	*	*	*	L241C068H12	PCB-SUB,POWER SW			PCS
*	*	*	*	*	*	U838S101H03	BANK		1	PCS
*	*	*	*	*	*	L073S001H23	TUBE-UL,18MM*1 PCS	11 DIA	18	M/M
*	*	*			*	L085D002H01	BOND-3M		0.1	G
*	*	*	*	*	*	U073S722H23	TAPE VINYL		0.15	M
*	*	*	*	*	*	U085S093H02	LOCK-TIGHT		0.6	G
*						L350Y083H01	TRANS-POWER		1	PCS
					*	L350Y085H01			1	PCS
		*		*		L350Y086H01			1	PCS
	*	*	*		*	L350Y087H01			1	PCS
*	*	*	*	*	*	L547B005H01	FRAME(L)		1	PCS
*	*	*	*	*	*	U680S322H04	WASHER-TOOTHED	4	4	PCS
*	*	*	*	*	*	U650S063H95	SCREW-B,TRANS FIX	M4*5	4	PCS
*	*	*	*	*	*	L230Y003H01	CONNECTOR		3	PCS
*	*	*	*	*	*	L980C108G30	PARTS-LIST			PCS
*	*	*	*	*	*	L980C108G40				PCS
*	*	*			*	U283S017H17	FUSE	5A-UL	2	PCS
		*	*	*	*	U283S022H28	FUSE	5A-SEMKO	2	PCS
*	*	*			*	U283S017H16	FUSE	4A-UL	2	PCS
			*	*	*	U283S022H22	FUSE	4A-SEMKO	2	PCS
*	*	*	*	*	*	L243C080H73	LEAD,S,P GND	BLK	2	PCS
*	*	*	*	*	*	L243C081H48	S,P L	BRN	1	PCS
*	*	*	*	*	*	L243C082H50	S,P R	RED	1	PCS
*	*	*	*	*	*	L260D063H02	TRANSIRTOR,Q429 Q430	2SB817(E)	2	PCS
*	*	*	*	*	*	L260D064H02	Q427 Q428	2SD1047(E)	2	PCS
*	*	*	*	*	*	L260D021H05	Q425 Q426	2SB649A(C)	2	PCS
*	*	*	*	*	*	L260D024H05	Q417 Q418 Q423 Q424	2SD669A(C)	4	PCS
*	*	*	*	*	*	U053S271H05	SOLDER-RESIN		2.55	G
*	*	*	*	*	*	L241A039H02	PCB-AMP		1	PCS
*	*	*	*	*	*	L541C017H01	ANGLE-PCB		1	PCS
*	*	*	*	*	*	L565B005H01	HEAT SINK		1	PCS
*	*	*	*	*	*	U680S322H03	WASHER-SPRING	3	10	PCS
*	*	*	*	*	*	U680S302H03	WASHER-TOOTHED	3	10	PCS
*	*	*	*	*	*	U670S201H02	NUT-BS	M3	10	PCS
*	*	*	*	*	*	U667S001H05	BOLT	3	10	PCS
*	*	*	*	*	*	U656S263H23	ANGLE/HEAT SINK FIX	T-SCREW 2-3*6	5	PCS

FR	GP	UK	EU	AS	SA	PARTS NUMBER	DESCRIPTION	SPECIFICATION	Q'TY	UNIT
US	CN	WG	EP	UT	JP					
		*				L703B033G50				PCS
			*			L703B033G60				PCS
				*		L703B033G70				PCS
					*	L703B033G80				PCS
					*	L703B033G90				PCS
*	*	*	*	*	*	L241B121G01	PCB-POST ASSY			PCS
			*			L241B121G02				PCS
*	*	*	*	*	*	U650S065H19	SCREW-B,SW*2 POST*4	M3*6	6	PCS
*	*	*	*	*	*	U670S003H02	NUT,BIND POST	M3	4	PCS
*	*	*	*	*	*	L241C069G01	PCB-RCA JACK	ASSY		PCS
*	*	*	*	*	*	U656S164H24	T-SCREW,RCA JACK FIX	1-3*8	2	PCS
*	*	*			*	L582A011H01	COVER-BACK			PCS
		*		*		L582A011H02				PCS
			*	*		L582A011H03				PCS
					*	L582A011H04				PCS
*	*	*				L242Y501H01	POWER-CORD			PCS
		*				U242C872H06				PCS
			*	*		U242C809H19				PCS
					*	L242Y013H01				PCS
					*	L242C310H01				PCS
*	*	*			*	L449Y002H01	SOCKET			PCS
*	*	*			*	L840D009H01	COVER-AC SOCKET			PCS
*	*		*	*	*	L431Y013H01	SW-SLIDE			PCS
		*				L431Y016G01				PCS
		*				L851D069H01	AC CORD TAG			PCS
		*				L851D070H01				PCS
*	*	*	*	*	*	L540D501H01	CLAMPER		1	PCS
*	*	*			*	U243C421H10	LEAD	BRN	1	PCS
*	*	*	*	*	*	L243C066H28		BLU	2	PCS
*	*	*	*	*	*	U053S271H05	SOLDER-RESIN		1.6	PCS
*	*	*			*	U053S271H05			0.4	PCS
*	*	*	*	*	*	L703D027H01	SW FIX PLATE		1	PCS
		*				L851B004H08	LABEL-DBP		1	PCS
*	*	*	*	*		L452C001G01	TERMAINAL-SP	ASSY	1	PCS
			*			L452C001G02		ASSY	1	PCS
*	*	*	*	*	*	L241A039H13	PCB-AMP, POST USE			PCS
*	*	*	*	*		L704C013H01	HAND-POST	BLK		PCS
			*			L704C013H03		BLK		PCS
*	*	*	*	*		L704C013H02		RED		PCS
			*			L704C013H04		RED		PCS
*	*	*	*	*		L541B018H01	HOLDER-POST			PCS
*	*	*	*	*	*	L685C001H01	POST			PCS
*	*	*	*	*	*	L685C002H01	HAND-POST			PCS
*	*	*	*	*	*	L680C006H01	WASHER-POST			PCS
*	*	*	*	*	*	U670S003H02	NUT	M3		PCS
*	*	*	*	*	*	L241C068H01	PCB-SUB		1	PCS
*	*	*	*	*	*	L241C068H11	RCA JACK			PCS
*	*	*	*	*	*	L440Y016H01	JACK-RCA		1	PCS
*	*	*	*	*	*	L242C096H26	LEAD-SHIED	BLU	1	PCS

FR	GP	UK	EU	AS	SA	PARTS NUMBER	DESCRIPTION	SPECIFICATION	Q'TY	UNIT
US	CN	WG	EP	UT	JP					
*	*	*	*	*	*	L242C076H35	LEAD-SHIELD	BLU	1	PCS
*	*	*	*	*	*	L242D507H08	LEAD		1	PCS
*	*	*	*	*	*	L582A001H01	CHASSIS-MAIN		1	PCS
	*					L851D071H02	LABEL-WARNING		1	PCS
*	*	*	*	*	*	U650S063H19	SCREW-B,SW-POWER FIX	M3*6	2	PCS
*	*	*	*	*	*	L432Y517H01	SW-PUSH		1	PCS
*	*	*	*	*	*	L230Y005H03	COVER-CAPACITOR		1	PCS
*	*	*	*	*	*	U140Y007H07	C-CERAMIC, C521	400V 472M	1	PCS
*	*	*			*	U243C426H39	LEAD	BLU	1	PCS
*	*	*			*	U243C421H34		BRN	1	PCS
			*	*	*	L230Y003H01	CONNECTOR		1	PCS
	*				*	L230Y003H01			2	PCS
*	*	*	*	*	*	U073S722H65	TUBE-VINYL	35 DIA BLK	0.65	M
*	*	*	*	*	*	L241C068H12	PCB-SUB,POWER SW			PCS
*	*	*	*	*	*	U838S101H03	BANK		1	PCS
*	*	*	*	*	*	L073S001H23	TUBE-UL,18MM*1 PCS	11 DIA	18	M/M
*	*	*			*	L085D002H01	BOND-3M		0.1	G
*	*	*	*	*	*	U073S722H23	TAPE VINYL		0.15	M
*	*	*	*	*	*	U085S093H02	LOCK-TIGHT		0.6	G
*						L350Y083H01	TRANS-POWER		1	PCS
					*	L350Y085H01			1	PCS
		*		*		L350Y086H01			1	PCS
	*	*	*		*	L350Y087H01			1	PCS
*	*	*	*	*	*	L547B005H01	FRAME(L)		1	PCS
*	*	*	*	*	*	U680S322H04	WASHER-TOOTHED	4	4	PCS
*	*	*	*	*	*	U650S063H95	SCREW-B,TRANS FIX	M4*5	4	PCS
*	*	*	*	*	*	L230Y003H01	CONNECTOR		3	PCS
*	*	*	*	*	*	L980C108G30	PARTS-LIST			PCS
*	*	*	*	*	*	L980C108G40				PCS
*	*	*			*	U283S017H17	FUSE	5A-UL	2	PCS
			*	*	*	U283S022H28	FUSE	5A-SEMKO	2	PCS
*	*	*			*	U283S017H16	FUSE	4A-UL	2	PCS
			*	*	*	U283S022H22	FUSE	4A-SEMKO	2	PCS
*	*	*	*	*	*	L243C080H73	LEAD,S,P GND	BLK	2	PCS
*	*	*	*	*	*	L243C081H48	S,P L	BRN	1	PCS
*	*	*	*	*	*	L243C082H50	S,P R	RED	1	PCS
*	*	*	*	*	*	L260D063H02	TRANSIRTOR,Q429 Q430	2SB817(E)	2	PCS
*	*	*	*	*	*	L260D064H02	Q427 Q428	2SD1047(E)	2	PCS
*	*	*	*	*	*	L260D021H05	Q425 Q426	2SB649A(C)	2	PCS
*	*	*	*	*	*	L260D024H05	Q417 Q418 Q423 Q424	2SD669A(C)	4	PCS
*	*	*	*	*	*	U053S271H05	SOLDER-RESIN		2.55	G
*	*	*	*	*	*	L241A039H02	PCB-AMP		1	PCS
*	*	*	*	*	*	L541C017H01	ANGLE-PCB		1	PCS
*	*	*	*	*	*	L565B005H01	HEAT SINK		1	PCS
*	*	*	*	*	*	U680S322H03	WASHER-SPRING	3	10	PCS
*	*	*	*	*	*	U680S302H03	WASHER-TOOTHED	3	10	PCS
*	*	*	*	*	*	U670S201H02	NUT-BS	M3	10	PCS
*	*	*	*	*	*	U667S001H05	BOLT	3	10	PCS
*	*	*	*	*	*	U656S263H23	ANGLE/HEAT SINK FIX	T-SCREW 2-3*6	5	PCS

FR	GP	UK	EU	AS	SA	PARTS NUMBER	DESCRIPTION	SPECIFICATION	Q'TY	UNIT
US	CN	WG	EP	UT	JP					
*	*	*	*	*	*	U656S263H23	TR FIX(ON SMALL HEAT SINK)	2-3*6	4	PCS
*	*	*	*	*	*	L242C072H25	SOFT CLIPPING	LEAD-SHIELD,RD	1	PCS
*	*	*	*	*	*	L243C299H05	LEAD	WHT	1	PCS
*	*	*	*	*	*	L243C299H28	LEAD	WHT	1	PCS
*	*	*	*	*	*	U070S670H10	SVGS-UL	10 DIA	0.5	M
*	*	*	*	*	*	L431Y014H01	SW-SLIDE	JW401	1	PCS
*	*	*	*	*	*	U053S271H04	SOLDER-RESIN		13	G
*	*	*	*	*	*	U243D200H01	W314,315,316,317,318,319	LEAD-JP, L:10	0.3	M
*	*	*	*	*	*	U243D200H01	W320,321,322,323,324,325	L:10	0.3	M
*	*	*	*	*	*	U243D200H01	W326,327,328,329,330,331	L:10	0.3	M
*	*	*	*	*	*	U243D200H01	W332,333,334,335,336,337	L:10	0.3	M
*	*	*	*	*	*	U243D200H01	W338,340,341,342,345,346	L:10	0.3	M
*	*	*	*	*	*	U243D200H01	W347 W238 W252	L:10	0.15	M
*	*	*	*	*	*	L103Y214H62	R-CARBON,R471,472	1/4W 1-J	2	PCS
*	*	*	*	*	*	L103Y214H64	R425,426,427,428,429,430	1/4W 18-J	6	PCS
*	*	*	*	*	*	L103Y214H64	R431 R432	1/4W 18-J	2	PCS
*	*	*	*	*	*	L103Y214H01	R457 R458	1/4W 10-J	2	PCS
*	*	*	*	*	*	L103Y214H06	R411 R414	1/4W 68-J	2	PCS
*	*	*	*	*	*	L103Y214H07	R477 R478 R479 R480	1/4W 100-J	4	PCS
*	*	*	*	*	*	L103Y214H11	R443 R444	1/4W 220-J	2	PCS
*	*	*	*	*	*	L103Y214H13	R459 R460	1/4W 330-J	2	PCS
*	*	*	*	*	*	L103Y214H15	R481 R482 R483 R484	1/4W 470-J	4	PCS
*	*	*	*	*	*	L103Y214H16	R453 R454	1/4W 560-J	2	PCS
*	*	*	*	*	*	L103Y214H17	R433 R434 R437 R438	1/4W 680-J	4	PCS
*	*	*	*	*	*	L103Y214H19	R456 R455	1/4W 1K-J	2	PCS
*	*	*	*	*	*	L103Y214H20	R435 R436 R439 R440	1/4W 1.2K-J	4	PCS
*	*	*	*	*	*	L103Y214H21	R417 R418 R419 R420	1/4W 1.5K-J	4	PCS
*	*	*	*	*	*	L103Y214H23	R407 R408 R409 R410	1/4W 2.2K-J	4	PCS
*	*	*	*	*	*	L103Y214H24	R452	1/4W 2.7K-J	1	PCS
*	*	*	*	*	*	L103Y214H28	R515 R516	1/4W 5.6K-J	2	PCS
*	*	*	*	*	*	L103Y214H33	R489,490,491,492,403,404	1/4W 15K-J	6	PCS
*	*	*	*	*	*	L103Y214H38	R405 R406	1/4W 39K-J	2	PCS
*	*	*	*	*	*	L103Y214H39	R-CARBON,R441,442,445,446	1/4W 47K-J	4	PCS
*	*	*	*	*	*	L103Y214H47	R401 R402	1/4W 220K-J	2	PCS
*	*	*	*	*	*	L103Y214H48	R517 R518	1/4W 270K-J	2	PCS
*	*	*	*	*	*	L103Y214H92	R415 R416 R421 R422	1/4W 440-J	4	PCS
*	*	*	*	*	*	L264Y220H01	D401,402,403,404,435,436 D415,416,425,426,427,428	DIODE,1N4148	6	PCS
*	*	*	*	*	*	L140Y306H10	C-CERAMIC, C407 C408	50V 681K	2	PCS
*	*	*	*	*	*	L140Y203H19	C417 C418 C419 C420	50V 22J	4	PCS
*	*	*	*	*	*	L140Y203H35	C437 C438 C439 C440	50V 101J	4	PCS
*	*	*	*	*	*	L140Y203H35	C449 C450 C451 C452	50V 101J	4	PCS
*	*	*	*	*	*	L150Y308H47	C433 C434 C435 C436	50V 331J	4	PCS
*	*	*	*	*	*	L150Y308H47	C441 C442 C443 C444	50V 331J	4	PCS
*	*	*	*	*	*	L140Y203H15	C425 C426 C423 C424	50V 15J	4	PCS
*	*	*	*	*	*	L140Y306H39	C501 C502 C503 C504	50V 223Z	4	PCS
*	*	*	*	*	*	L140Y306H45	C507 C508	50V 473Z	2	PCS
*	*	*	*	*	*	L140Y201H25	C445 C446 C447 C448	25V 104K	4	PCS
*	*	*	*	*	*	L172Y306H02	C-POLY,C405 C406	50V 122J	2	PCS

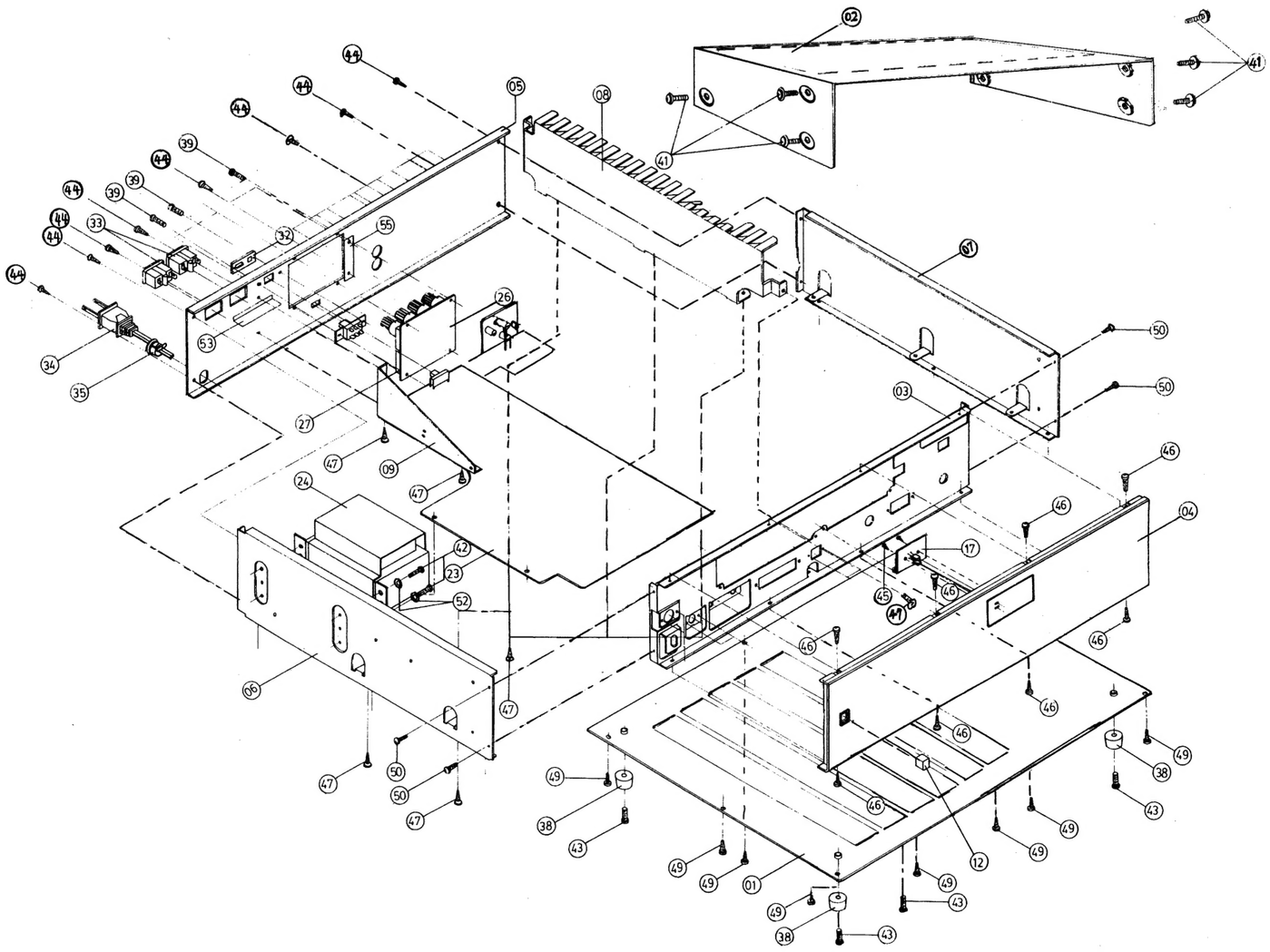
FR	GP	UK	EU	AS	SA	PARTS NUMBER	DESCRIPTION	SPECIFICATION	Q'TY	UNIT
US	CN	WG	EP	UT	JP					
*	*	*	*	*	*	L172Y306H25	C427 C428	50V 104J	2	PCS
*	*	*	*	*	*	U182S333H40	C-ELECT,C402 C403 C404	50V 1	3	PCS
*	*	*	*	*	*	U182Y322H34	C421 C422	25V 10	2	PCS
*	*	*	*	*	*	L182Y322H23	C411 C412 C413 C414	16V 22	4	PCS
*	*	*	*	*	*	L182Y322H13	C490 C410	10V 47	2	PCS
*	*	*	*	*	*	L450D501H01	FUSE-HOLDER		8	PCS
*	*	*	*	*	*	L260D057H01	Q405,406,407,408,409,410	2SA970(GR)	6	PCS
*	*	*	*	*	*	L260D057H01	Q413 Q414 Q441 Q442	2SA970(GR)	4	PCS
*	*	*	*	*	*	L260D058H01	Q401,402,403,404,411,412	2SC2240(GR)	6	PCS
*	*	*	*	*	*	L260D058H01	Q415 Q416 Q439 R440	2SC2240(GR)	4	PCS
*	*	*	*	*	*	L260D021H05	Q435 Q436	2SB649A(C)	2	PCS
*	*	*	*	*	*	L260D024H05	Q437 Q438	2SD669A(C)	2	PCS
*	*	*	*	*	*	L260D059H01	Q421 Q422	2SA1360(Y)	2	PCS
*	*	*	*	*	*	L260D060H01	Q419 Q420	2SC3423(Y)	2	PCS
*	*	*	*	*	*	L260D061H03	Q431 Q432	2SB826	2	PCS
*	*	*	*	*	*	L260D062H03	Q433 Q434	2SD1062	2	PCS
*	*	*	*	*	*	L565D502H01	RADIATOR		4	PCS
*	*	*	*	*	*	U264S010H01	D417 D418 D419 D420	DIODE, 1SS81	4	PCS
*	*	*	*	*	*	U164D022H01	D421 D422 D423 D424	GFB30(B)	4	PCS
*	*	*	*	*	*	L264C003H16	D407 D408 D409 D410	UZ-3.9B	4	PCS
*	*	*	*	*	*	L164C003H20	D411 D412 D413 D414	UZ-4.7B	4	PCS
*	*	*	*	*	*	L264C003H36	D433 D434 D431 D432	UZ-8.2B(M)	4	PCS
*	*	*	*	*	*	L264C003H53	D405 D406	UZ-15BL	2	PCS
*	*	*	*	*	*	L264D017H01	BD502	PB153M	1	PCS
*	*	*	*	*	*	L264D018H01	BD501	PBL403	1	PCS
*	*	*	*	*	*	L422Y001H14	BREAKER,BK-1,BK-2	A-40	2	PCS
*	*	*	*	*	*	L127Y003H02	VR,VR403 VR404	B1K	2	PCS
*	*	*	*	*	*	L127Y003H07	SVR, VR401 VR402	B10K	2	PCS
*	*	*	*	*	*	L361Y023H01	COIL SPRING		2	PCS
*	*	*	*	*	*	L265Y001H06	PTC	RED 185A	2	PCS
*	*	*	*	*	*	U685S223H01	PIN		5	PCS
*	*	*	*	*	*	U243S001H04	W349 W350 W351 W352	LEAD-JP, L:5	0.14	M
*	*	*	*	*	*	U103S017H13	R-CARBON, R513 R514	1/4W 330-J	2	PCS
*	*	*	*	*	*	U103S017H24	R451	1/4W 2.7K-J	1	PCS
*	*	*	*	*	*	L103Y022H62		1/4W 1-J	0.1	PCS
*	*	*	*	*	*	L103Y022H31	R520	1/4W 10K-J	1	PCS
*	*	*	*	*	*	L103Y041H30	R413 R414 R423 R424	1/2W 8.2K-J	4	PCS
*	*	*	*	*	*	L103Y041H27	R475 R476	1/2W 4.7K-J	2	PCS
*	*	*	*	*	*	L103Y041H34	R469 R470	1/2W 18K-J	2	PCS
*	*	*	*	*	*	U103S007H01	R-METER,R501 R502	1W 10-J	2	PCS
*	*	*	*	*	*	U103S007H35	R493 R494 R495 R496	1W 6.8K-J	4	PCS
*	*	*	*	*	*	U103S007H38	R497 R498 R499 R500	1W 12K-J	4	PCS
*	*	*	*	*	*	U103S007H39	R447 R448 R449 R450	1W 15K-J	4	PCS
*	*	*	*	*	*	U103S140H60	R-CARBON,R461,462,463,464	1/3W 3.3-J	4	PCS
*	*	*	*	*	*	U103S140H06	R465 R466 R467 R468	1/3W 68-J	4	PCS
*	*	*	*	*	*	U103S140H19	R485 R486 R487 R488	1/3W 1K-J	4	PCS
			*			U105S006H46	R-METAL,R520,521	2W 10-J	2	PCS
			*			U140S005H27	C-CERAMIC,C526 C527	50V 103Z	2	PCS
*	*	*	*	*	*	U182S022H68	C-ELECT,C453,454,455,456	50V 100	4	PCS

FR US	GP CN	UK WG	EU EP	AS UT	SA JP	PARTS NUMBER	DESCRIPTION	SPECIFICATION	Q'TY	UNIT
*	*	*	*	*	*	U182S033H40	C401	50V 1	4	PCS
*	*	*	*	*	*	L180Y041H01	C415 C416	50V 220	2	PCS
*	*	*	*	*	*	U180S016H01	C505 C506	50V 6800	2	PCS
*	*	*	*	*	*	L180Y038H01	C509 C510	80V 6800	2	PCS
*	*	*	*	*	*	U182S022H88	C429 C430 C431 C432	100V 10	4	PCS
*	*	*	*	*	*	L243C092H46	LEAD-TAPE, JW306	2P	1	PCS
*	*	*	*	*	*	L243C092H42	LEAD-TAPE, JW307	2P	1	PCS
*	*	*	*	*	*	U242C626H20	LEAD-SHIELD	BLU	1	PCS
*	*	*	*	*	*	U243C592H32	LEAD	RED	1	PCS
*	*	*	*	*	*	U070S670H01	SVGS-UL, 10MM*20 PCS	1 DIA	0.2	M
*	*	*	*	*	*	U070S670H02	10MM*2	2 DIA	0.2	M
*	*	*	*	*	*	U838S101H01	BAND		3	PCS
*	*	*	*	*	*	U085S093H02	LOCTK-TIGHT		0.5	G
*	*	*	*	*	*	U085S094H07	HOT MELT -	ADHESIVE	0.5	G
*	*	*	*	*	*	U085S091H13	CEMEDINE	NO.575	0.6	G
*	*	*	*	*	*	U091S650H18	SILICONE GEEASE	KS-609	0.5	G
*	*	*	*	*	*	U070S670H11	SVGS-UL	12 DIA	16.5	M/M
*	*	*	*	*	*	U103S140H60	R-CARBON	1/3W 3.3-J	0.1	PCS
*	*	*	*	*	*	U103S140H06		1/3W 68-J	0.1	PCS
*	*	*	*	*	*	U685S223H01	PIN		2	PCS
*	*	*	*	*	*	L241A039H16	PCB-AMP	(LED)		PCS
*	*	*	*	*	*	L268Y026H01	POWER LED (GRN),LE-DIODE	SE-9421D	1	PCS
*	*	*	*	*	*	L268Y027H01	SOFT CLIPPING (YEL)	SE-9431D	1	PCS
*	*	*	*	*	*	L103Y022H31	R-CARBON,R521	1/4W 10K-J	1	PCS
*	*	*	*	*	*	L580A002H01	COVER-BOTT		1	PCS
*	*	*	*	*	*	L771D006H01	FOOT RUBBER		4	PCS
*	*	*	*	*	*	L851D056H01	LABEL-QA		1	PCS
*	*	*	*	*	*	L552D013H01	CUSHION		2	PCS
*	*	*	*	*	*	L739D001H02	STOPPER-WASHER		4	PCS
*	*	*	*	*	*	U650S025H31	SCREW-F,FOOT-RUBBER FIX	M4*10	1	PCS
*	*	*	*	*	*	L831D003H01	BAG-POLY		1	PCS
	*					L850C006H01	CARD-ADDENDUM		1	PCS
*	*	*	*	*	*	U096S004H01	TAPE,30MM*1 PCS	W:12	0.03	M
*	*	*	*	*	*	L871B003H75	INSTRUCTION	BOOK	1	PCS
	*			*		L450Y002H01	PLUG		1	PCS
		*				L850B016H11	CARD		1	PCS
*						L850C007H01	WARRANTY CARD		1	PCS
*	*	*	*	*	*	L243Y009H01	LEAD-RCA PLUG		1	PCS

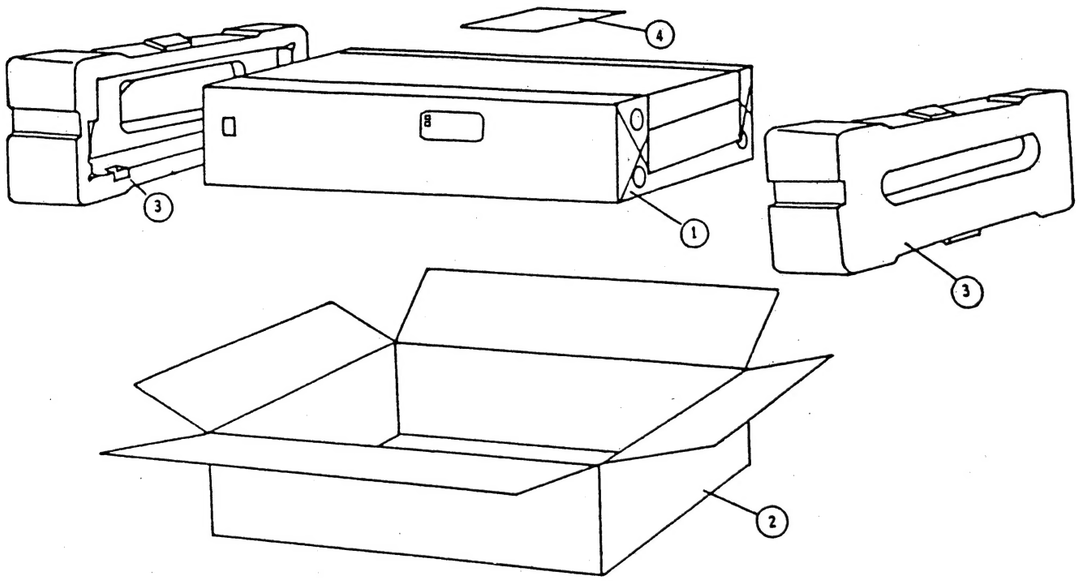
2240PE EXPLODED LIST

ITEM	PARTS NO.	NAME		Q'TY
01	L580A002H01	COVER BOTTOM		1
02	L561A010H01	CABINET		1
03	L582A001H01	CHASSIS, FRONT SUB		1
04	L702A047H01	PANEL, FRONT		1
05	L582A011H01	PANEL, REAR	A1	1
05	L582A011H01	PANEL, REAR	A2	1
05	L582A011H01	PANEL, REAR	A	1
05	L582A011H02	PANEL, REAR	B	1
05	L582A011H03	PANEL, REAR	C1	1
05	L582A011H03	PANEL, REAR	C	1
05	L582A011H02	PANEL, REAR	B1	1
05	L582A011H02	PANEL, REAR	C3	1
05	L582A011H02	PANEL, REAR	C2	1
06	L547B005H01	FRAME (L)		1
07	L547B006H01	FRAME (R)		1
08	L565B005H01	HEAR SINK		1
09	L541C017H01	BRACKER, PCB SUPPORT		1
12	L704D061H02	KNOB POWER		1
17	L241B092G60	PCB ASS'Y MAIN (LED)		1
23	L241B120G01	PCB ASS'Y MAIN		1
24	L350Y083H01	TRANSFORMER, MAIN POWER	A1	1
24	L350Y087H01	TRANSFORMER, MAIN POWER	A/A2	1
24	L350Y087H01	TRANSFORMER, MAIN POWER	C/C1/C3	1
24	L350Y086H01	TRANSFORMER, MAIN POWER	B1/B	1
24	L350Y085H01	TRANSFORMER, MAIN POWER	C2	1
26	L241B121G01	PCB ASS'Y BINDING POSTS		1
26	L241B121G02	PCB ASS'Y BINDING POSTS	only C	1
27	L452C001G01	TERMINAL-SPK		1
27	L452C001G02	TERMINAL-SPK , for EU		1
32	L703D027H01	PLATE SWITCH LOCK		1
33	L449Y002H01	AC SOCKET	A1	2
33	L449Y002H01	AC SOCKET	A2	2
33	L449Y002H01	AC SOCKET	A	2
33	L449Y002H01	AC SOCKET	C3	2
33	L449Y002H01	AC SOCKET	C2	2
34	L242Y501H01	AC CORD	A1	1
34	L242Y501H01	AC CORD	A2	1
34	L242Y501H01	AC CORD	A	1
34	U242C872H06	AC CORD	B	1
34	U242C809H19	AC CORD	C1	1
34	U242C809H19	AC CORD	C	1
34	U242Y013H01	AC CORD	B1	1
34	U242C310H01	AC CORD	C3	1
34	U242C809H19	AC CORD	C2	1
35	L540D501H01	CLAMPER		1
38	L771D006H01	FOOT RUBBER		4
39	U650S065H19	SCREW-BM3x6		6
41	L650S063H95	SCREW-PM4x10		6
42	U650S063H95	SCREW-PM4x10		4
44	U656S164H23	SCREW-TAP 1-3x6		10

EXPLODED VIEW



PICKING DIAGRAM



2240PE PACKING LIST

ITEM	NUMBER	NAME	Q'TY
1	L831D002H01	Bag-Poly	1
2	L800D003H05	Carton Indiyidual	1
3	L813A006H01	Styro Packing	2
4	L871B003H75	Instruction	1
	OR L871B004H42	Instruction, WG only	

SERVICE MANUAL

2240PE

POWER AMPLIFIER

NAD ELECTRONICS
BOSTON/LONDON